

What is claimed is:

1 Process for the MPEG type video coding of high definition images, an image
5 being split into panels, an encoder being assigned to each panel, one or more
panels constituting, over the length of the image, a horizontal band of the
image, wherein a global regulation, at the level of a band, is implemented as a
function of a preset bit rate for the band and on the basis of a single Video
Buffering Verifier (VBV) taking into account the state of the buffer memories of
10 the encoders of the band.

2 Process according to Claim 1, wherein the preset bit rate allocated to a
horizontal band is dependent on the cost of coding the band relative to the cost
of coding a complete image.

15 3 Process according to Claim 2, wherein the coding cost is calculated on the
basis of a preanalysis of the image.

20 4 Process according to Claim 2, wherein the coding cost is calculated on the
basis of the cost of coding or complexity of a previous image.

25 5 Process according to Claim 2, wherein the preset bit rate for a horizontal band
is in part the preset bit rate for the complete image, divided by the number of
horizontal bands, in part a dynamic allocation of the preset bit rate for the
complete image, dependent on the complexity of the band.

6 Process according to Claim 2, wherein the preset bit rate of a horizontal band
is equal to:

$$Di = \left(p \frac{Xi}{X} + (1-p) \frac{n}{N} \right) D$$

30 where : Di is the bit rate of the horizontal band,
 D is the bit rate for the global image,
 Xi is the complexity of the horizontal band,
 X is the total complexity of the image,
 n is the number of panels per horizontal band,
 N is the total number of panels in the image,

p is the percentage of bit rate assigned to dynamic allocation relative to the global bit rate.

7 Device for the video coding of high resolution images, an image being divided into several horizontal bands and the bands into panels, the device comprising a set of encoders of MPEG type, each encoder being dedicated to the coding of a panel, wherein each encoder of one and the same band calculates a quantization step per row of macroblocks as a function of the same information, corresponding to the sum of the coding costs and of the output bit rates of the set of encoders of this band and corresponding to a unique Video Buffering Verifier (VBV) for the band, so as to obtain one and the same quantization step, and in that the encoders perform a coding by dynamic allocation, the bit rate allotted to the set of encoders of a band being calculated on the basis of the complexity of coding the band relative to the complexity of coding the complete image.

8 Device according to Claim 7, wherein the information is exchanged over the multiplexing bus linking the encoders and used for the transmission of the transport streams of the encoders.

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